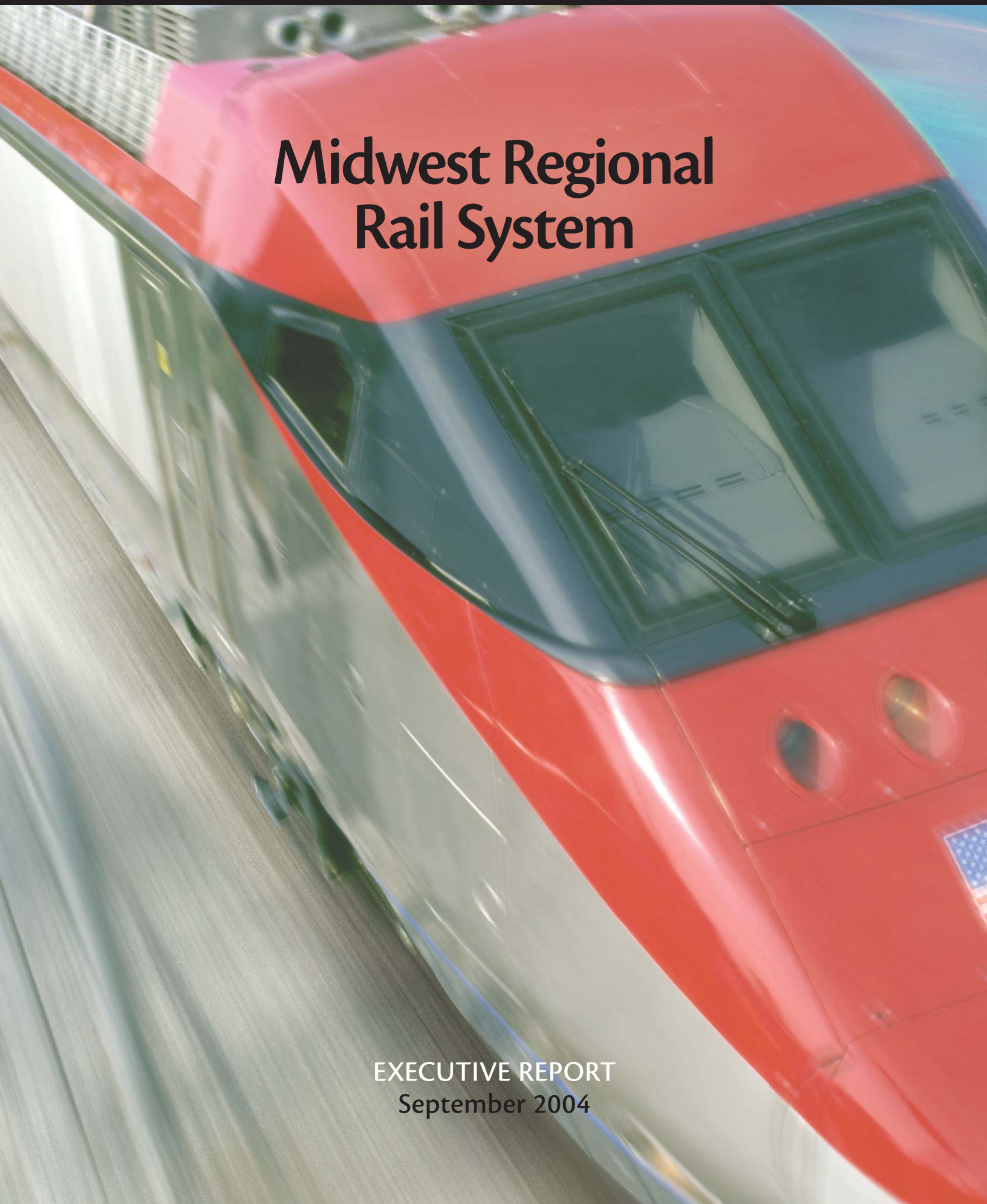
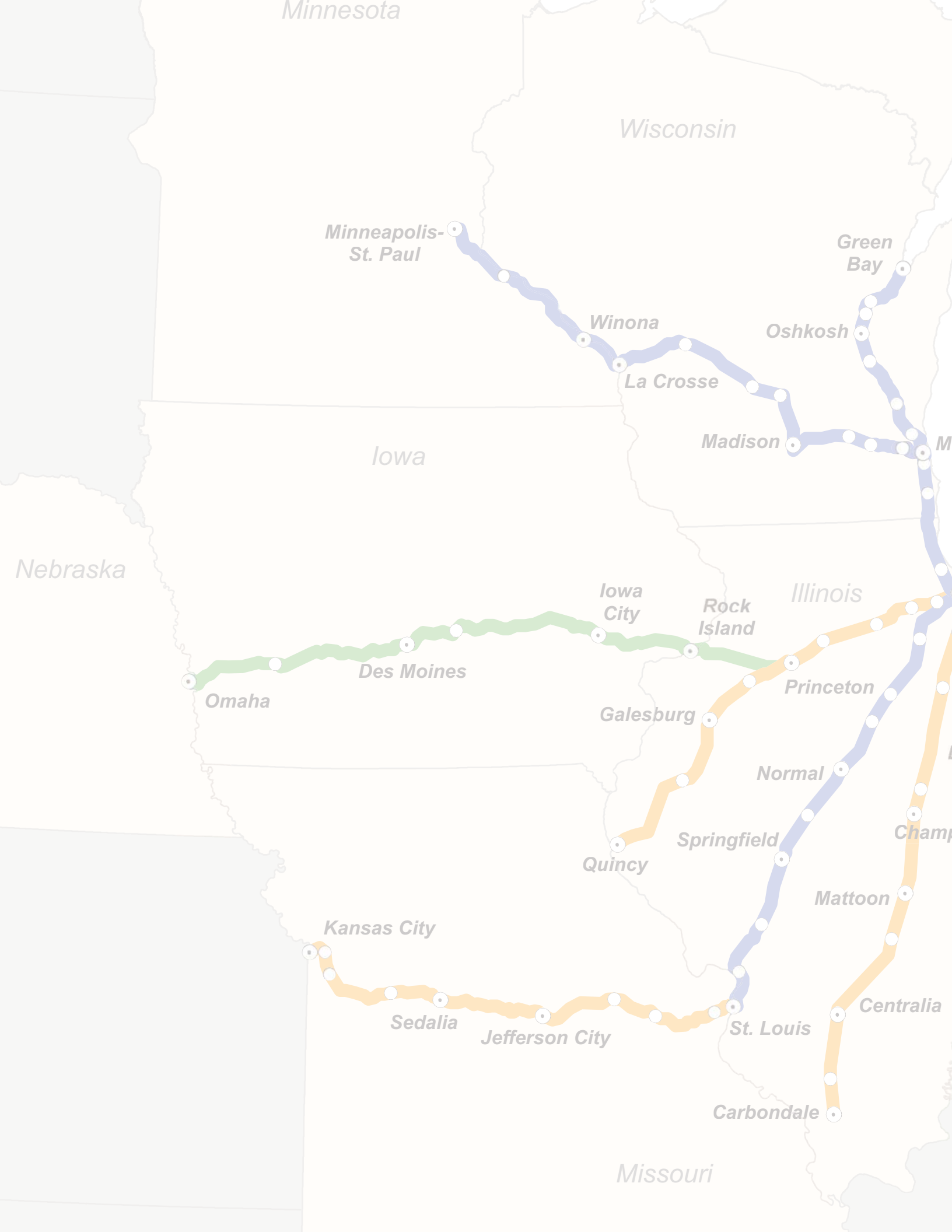
A Transportation Network for the 21st Century



Midwest Regional Rail System

EXECUTIVE REPORT
September 2004


Minnesota
Wisconsin
Minneapolis-
St. Paul
Green
Bay
Winona
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La Crosse
Madison
Iowa
Nebraska
Illinois
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Island
Des Moines
Omaha
Princeton
Galesburg
Normal
Springfield
Quincy
Mattoon
Kansas City
Centralia
Sedalia
Jefferson City
St. Louis
Carbondale
Missouri

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EXECUTIVE REPORT

September 2004

Prepared for

Illinois Department of Transportation

Indiana Department of Transportation

Iowa Department of Transportation

Michigan Department of Transportation

Minnesota Department of Transportation

Missouri Department of Transportation

Nebraska Department of Roads

Ohio Rail Development Commission

Wisconsin Department of Transportation

Prepared by

Transportation Economics & Management Systems, Inc.

In association with

HNTB Corporation

The Midwest Regional Rail Initiative (MWRRI) is an ongoing effort to develop an improved and expanded passenger rail system in the Midwest. The sponsors of the Midwest Regional Rail Initiative are the transportation agencies of nine Midwest states—Illinois Department of Transportation, Indiana Department of Transportation, Iowa Department of Transportation, Michigan Department of Transportation, Minnesota Department of Transportation, Missouri Department of Transportation, Nebraska Department of Roads, Ohio Rail Development Commission and Wisconsin Department of Transportation—along with Amtrak and the Federal Railroad Administration (FRA).

This 2004 Executive Report updates prior plans for the Midwest Regional Rail System published in August 1998 and February 2000. This report refines and updates infrastructure and equipment capital cost estimates as well as ridership, revenue and operating cost estimates; it provides further detail related to feeder bus operational requirements; and it further assesses freight rail capacity needs related to the enhancement and expansion of modern passenger service.

A Steering Committee, composed of key staff from each state agency and Amtrak, provided oversight and direction to the consultant team retained to conduct the study. The Wisconsin Department of Transportation served as Secretariat for the Steering Committee.

Transportation Economics & Management Systems, Inc. of Frederick, Maryland, led the consultant team and was responsible for ridership and revenue forecasts, operations planning, financial and economic analysis, institutional arrangements, implementation and business planning, and directing the work of the other members of the consultant team. HNTB Corporation provided the assessment of infrastructure requirements.

Amtrak provided extensive technical support and analysis in all aspects of this study throughout its four-year period. Greyhound Lines, Inc. provided technical assistance in the analysis of feeder bus service. Talgo, Inc. provided technical assistance in estimating equipment purchase and maintenance costs.

This report was financed, in part, by the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio and Wisconsin. Greyhound Lines, Inc. and the FRA provided additional funding and support.

Vision: Midwest Regional Rail System

Since 1996, the Midwest Regional Rail Initiative (MWRRI) advanced from a series of service concepts, including increased operating speeds, train frequencies, system connectivity, and high service reliability, into a well-defined vision for creating a 21st century regional passenger rail system. This vision reflects a fundamental change in the manner in which passenger rail service is provided throughout the Midwest. This system would use existing rail rights-of-way shared with freight and commuter rail and would connect nine Midwest states to serve their growing populations. System synergies and economies of scale, including better equipment utilization, more efficient crew and employee utilization, and a multi-state train equipment procurement can be realized through this regional rail system.

This vision has been transformed into a transportation plan—known as the Midwest Regional Rail System (MWRRS). The primary purpose of the MWRRS is to meet current and future regional travel needs through significant improvements to the level and quality of passenger rail service. The rail service and its stations will also provide a stimulus for joint development in communities served by the system. Based on the updated analysis documented in this report, senior officials from the nine Midwest states continue to confirm that this plan provides a viable framework for developing and implementing this 21st century regional passenger rail system.

"This plan update confirms that the Midwest Regional Rail System continues to provide a viable framework for developing and implementing a 21st century regional passenger rail system."

"The primary purpose of the MWRRS is to meet current and future regional travel needs through significant improvements to the level and quality of passenger rail service."

"System synergies and economies of scale, including better equipment utilization, more effective crew and employee utilization and a multi-state train equipment procurement can be realized through this regional rail system."

MWRRS Elements

Planned MWRRS elements will improve Midwest travel. The major plan elements include:

- Use of 3,000 miles of existing rail rights-of-way to connect rural, small urban, and major metropolitan areas
- Operation of a "hub-and-spoke" passenger rail system providing service to and through Chicago to locations throughout the Midwest
- Introduction of modern train equipment operating at speeds up to 110 mph
- Provision of multi-modal connections to improve system access
- Improvement in reliability and on-time performance

Proposed Midwest Regional Rail System

*Indiana DOT is evaluating additional passenger rail service to South Bend and to Louisville.
**In Missouri, current restrictions limit train speeds to 79 mph.

Opportunity and the MWRRS

As planned, the MWRRS will improve mobility and stimulate economic development.

It affords the opportunity to:

- Greatly enhance passenger rail service throughout the Midwest
- Achieve significant reductions in travel times and improve service reliability to Midwest areas currently served by passenger rail
- Introduce passenger rail service to Midwest areas currently not served by passenger rail
- Introduce a regional passenger rail system designed to generate revenues which could cover operating costs when it is fully implemented
- Provide major capital investments in rail infrastructure to improve passenger and freight train safety and reliability on shared rights-of-way
- Support economic development activities near stations

Focus of the 2004 Executive Report

Planning for the MWRRS has progressed from the concept stage to the feasibility stage. This Executive Report highlights the findings resulting from a technical review and refinement of major plan elements. These include updates and refinements to:

- Ridership, revenue and operating cost estimates
- Operating plan
- Feeder bus recommendations
- Infrastructure and equipment capital cost estimates
- Freight rail capacity needs analysis
- Implementation plan phasing
- Financial plan
- Project coordination

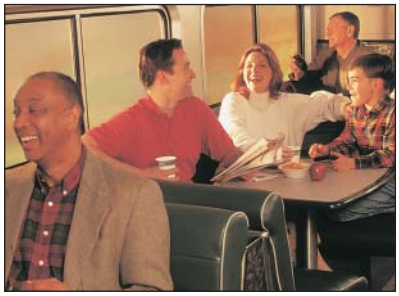
"The MWRRS:

- *Reduces travel time*
- *Improves service reliability*
- *Expands regional travel services*
- *Improves passenger and freight train safety*
- *Creates development opportunities"*

MWRRS Key Assumptions

Successful implementation and operation of the MWRRS requires ongoing dialogue and coordination involving the Midwest state transportation agencies, freight and commuter railroads, railroad labor, funding entities, and the public. The findings and recommendations included in this report are based on several key assumptions. Major changes in these assumptions could alter the projections and economics associated with the MWRRS. These assumptions are:

- Ridership and revenue projections assume the construction of the entire system and introduction of new service and trip times according to the proposed project phasing schedule, and the predicted response from travelers to a fully integrated Midwest Regional Rail System
- Operating plans for passenger train frequencies, schedules, and speeds are achievable through cooperative agreements with the freight railroads, commuter railroads and labor unions
- Infrastructure improvements are dependent upon the freight railroads' and commuter rail operators' commitment to the construction schedule
- Funding for planning, construction, and equipment procurement is available to support the implementation schedule
- Funding support for operations is available during the start-up and implementation period



"Successful implementation and operation of the MWRRS require ongoing dialogue and coordination involving the Midwest state transportation agencies, freight and commuter railroads, railroad labor, funding entities, and the public."

"The MWRRS plan is based on several key assumptions involving:

- *Ridership & revenue estimates*
- *Rail operation plans*
- *Infrastructure improvements*
- *Project funding"*

Travel Market Served

Significantly reduced travel times, increased frequencies, improved service reliability and intermodal connectivity are key to revitalizing passenger rail service in the Midwest. Attributes inherent to the MWRRS will attract a broad ridership market. In 2025, with full implementation of the system, the MWRRS is forecast to annually attract approximately 13.6 million passengers. This level of ridership is estimated to be four times greater than would occur if the existing passenger train service were to be continued without improvement. MWRRS ridership and revenue forecasts were updated using the results of additional and expanded travel market field surveys and the latest 2000 US Census data.

"In 2025, the MWRRS is forecast to annually attract approximately 13.6 million passengers."

"Approximately 90 percent of the Midwest population will be within a one-hour ride of a MWRRS station and/or 30 minutes of a feeder bus station."

For the markets served, the MWRRS will provide a level of service, comfort, convenience, and a wide range of fares that will attract a broad spectrum of travelers. The MWRRS fares will be competitive with air travel and have the potential to generate revenue levels in excess of operating costs after the system's ramp-up period. Average MWRRS fares are estimated to be up to 50 percent higher than current Amtrak fares to reflect improved services.

Feeder Bus System

Access to the Midwest rail system will be enhanced by the operation of a feeder bus system. The feeder bus network extends the reach of the system to outlying areas. With full implementation of the MWRRS, including the feeder bus system, approximately 90 percent of the Midwest region's population will be within a one-hour ride of a MWRRS rail station and/or 30 minutes of a MWRRS feeder bus station. Feeder bus lines will be privately owned and operated. Operating hours and schedules will be coordinated with train schedules to optimize the bus system's utility and minimize transfer time to MWRRS trains. The feeder bus network and operating plan was developed with the assistance of Greyhound Lines, Inc.

EXAMPLE ONE-WAY MWRRS FARES

	Estimated Fares	
City Pairs	Non-business	Business
Milwaukee–Chicago	$18	$24
St. Paul–Madison	$55	$73
Green Bay–Chicago	$57	$76
Chicago–Detroit	$45	$60
Grand Rapids–Chicago	$33	$44
Port Huron–Lansing	$21	$28
Toledo–Cleveland	$24	$33
Indianapolis–Cincinnati	$24	$32
Champaign–Chicago	$28	$38
St. Louis–Springfield, IL	$20	$27
Jefferson City–Kansas City	$29	$39
Des Moines–Omaha	$30	$40

Service Attributes and Travel Market

Collectively, MWRRS train and feeder bus services will provide numerous attributes and benefits:

- A new transportation option in major travel corridors that are experiencing significant levels of congestion
- A time competitive service for short to medium-distance trips
- A transportation choice for smaller communities which do not have or are under-served by commercial air service
- A travel environment conducive to both business and leisure travel
- A means to expand workforce recruitment by employers located in communities served by the MWRRS
- A transportation choice that affords travelers downtown-to-downtown connectivity between major urban centers
- A transportation system for individuals who do not or cannot drive a motor vehicle (e.g. elderly and/or disabled individuals)

"Numerous benefits will be derived from the MWRRS train and feeder bus services, including:

- *Availability of a new travel option for short to medium-distance trips*
- *Downtown-to-downtown connectivity between urban centers*
- *Means to expand work-force recruitment"*

NUMBER OF DAILY ROUND TRIPS

MWRRS Corridors/ City Pairs	Current Amtrak Service	Fully Implemented MWRRS
Chicago–Detroit/Grand Rapids/Port Huron		
Chicago–Detroit	3	9
Chicago–Kalamazoo/Niles	4	14
Kalamazoo/Niles–Ann Arbor	3	10
Ann Arbor–Detroit	3	10
Detroit–Pontiac	3	7
Kalamazoo–Grand Rapids–Holland	0	4
Battle Creek–Port Huron	1	4
Chicago–Cleveland		
Chicago–Cleveland	2*	8**
Chicago–Fort Wayne	0	8
Fort Wayne–Toledo	0	8
Toledo–Cleveland	2*	9
Chicago–Cincinnati		
Chicago–Cincinnati	1*	5
Chicago–Indianapolis	1*	6
Indianapolis–Cincinnati	1*	6**
Chicago–Carbondale		
Chicago–Carbondale	2*	2
Chicago–Champaign	2*	5
Chicago–Carbondale	2*	2
Chicago–St. Louis		
Chicago–St. Louis	3*	8
Chicago–Joliet	3*	8
Joliet–Springfield	3*	8
Springfield–St. Louis	3*	8
St. Louis–Kansas City	*2*	*6*
Chicago–Quincy	*1*	*4*
Chicago–Omaha		
Chicago–Omaha	1*	4**
Chicago–Naperville	3*	9
Naperville–Rock Island	0	5
Rock Island–Iowa City	0	5
Iowa City–Des Moines	0	5
Des Moines–Omaha	0	4
Chicago–Milwaukee–St. Paul/Green Bay		
Chicago–Milwaukee–St. Paul	1*	6
Chicago–Milwaukee	8*	17
Milwaukee–Madison	0	10**
Madison–St. Paul	0	6
Chicago–Milwaukee–Green Bay	0	7

* Includes Amtrak long–distance trains
** MWRRS route differs from current Amtrak service